

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number  
**WO 2005/053523 A1**

(51) International Patent Classification<sup>7</sup>: **A61B 5/00, 5/05**(21) International Application Number:  
**PCT/CH2004/000077**

(22) International Filing Date: 10 February 2004 (10.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
**PCT/CH03/00795**

2 December 2003 (02.12.2003) CH

(71) Applicant (for all designated States except US): **PENDRAGON MEDICAL LTD. [CH/CH]; Hagenholzstrasse 81 a, CH-8050 Zürich (CH).**

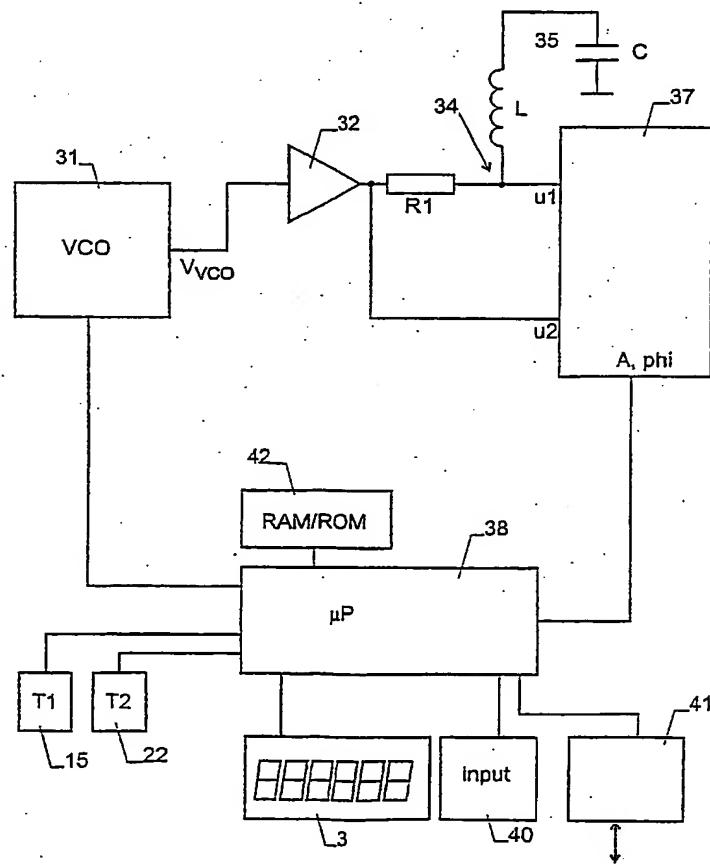
(72) Inventors; and

(75) Inventors/Applicants (for US only): **CADUFF, Andreas [CH/CH]; Klingenstrasse 21, CH-8005 Zürich**

(CH). **BUSCHOR, Stephan [CH/CH]; Stiglenstrasse 31/14, CH-8052 Zürich (CH). TRUFFER, Pascal [CH/CH]; Giblenstrasse 55, CH-8049 Zürich (CH). HIRT, Etienne [CH/CH]; Röhrliberg 50, CH-6330 Cham (CH). STALDER, Gianluca [CH/CH]; Alpenstrasse 9, CH-8800 Thalwil (CH).**

(74) Agent: **E. BLUM & CO.; Vorderberg 11, CH-8004 Zürich (CH).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

*[Continued on next page]*(54) Title: **A DEVICE AND METHOD FOR MEASURING A PROPERTY OF LIVING TISSUE**

(57) Abstract: A device for measuring the glucose level in living tissue has electrodes (5, 6) for being brought into contact with the specimen and a voltage-controlled oscillator (31) as a signal source for generating an AC voltage in a given frequency range. The AC voltage is applied to the electrodes (5, 6). A voltage over the electrodes is fed to a processing circuitry (37, 38), which converts it to the glucose level using calibration data. The voltage-controlled oscillator (31) has a symmetric design with adjustable gain for generating signals in a large frequency range with low distortions at a low supply voltage. The processing circuit comprises a simple rectifier network with software-based correction. The electrodes (5, 6) are of asymmetric design and optimized for biological compatibility.

WO 2005/053523 A1

EXPRESS MAIL LABEL  
NO.: EV 815 584 322 US



- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

- *with international search report*